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The Whitechapel Murders—Old and New.

By Dr. Andrew Wilson. See page 402.

Healthy Marriage. See page 407.

HEALTH

A WEEKLY JOURNAL OF

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EDITED BY DR. ANDREW WILSON, F.R.S.E. &c.

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HEALTH

EDITED BY

DR. ANDREW WILSON, F.R.S.E., &c.

LONDON: *FRIDAY, SEPTEMBER* 28, 1888.

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Notes by the Way

BY THE EDITOR.

"Health is the foundation of all our physical happiness."—*Herder.*

MR. GEORGE R. SIMS is a writer whose light and humorous sketches I always read with pleasure and profit. So long as "Dagonet" sticks to his last, he is readable and interesting; but when he dives into fields that are strange and pastures that are new to him, he goes astray, like most other units belonging to poor humanity's crowd. In illustration of my remarks, I may instance a series of observations made by Mr. Sims in the last issue of the *Referee*. Dealing with insanitary houses, he observes that "The importance of making the houses of great cities as free from danger to health as possible no one will question. Unfortunately the process is an expensive one, and generally falls upon the wrong party. The householder does not always find out that he has a death-trap in his house until he has taken the responsibility of removing it upon his own shoulders. Many of the best-looking and most attractive houses in London are whited sepulchres, and the middle-class and lower-class dwellings are sepulchres without even the outside adornment of whiteness."

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THIS is a very old story, as Mr. Sims should know, and one that has attracted the notice of sanitarians ever since the death of the Prince Consort taught the nation a lesson regarding the connection which exists between defective drainage and typhoid fever. If he had perused the medical and sanitary journals with regularity, Mr. Sims would have discovered years ago, that they have been impressing upon the people the paramount duty of every landlord, and of every householder as well, to ensure that the drainage of houses is safe and reliable; a matter now of tolerably easy attainment by cutting off the house drain from the sewer by means of an air trap. This being the actual state of all sanitary teaching, it is surprising to find any journalist to-day writing as Mr. Sims does in the following strain:—

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"To come to my point bang and without further manœuvring, what I want to suggest is this: That it shall be made illegal for any house, old or new, intended for human habitation, to be let without its having first been duly licensed by a sanitary board or board of health. Every houseowner would require a licence for his property—a licence which would certify that it had been examined by competent sanitary inspectors, and that it was not dangerous to health. This would ensure one of the greatest sanitary reforms of modern times, and the benefit to the whole community would be incalculable. I maintain that a man who gets his living by letting houses has no more right to let one that is dangerous to health than a butcher has to sell meat unfit for food. The subject is a vast and an all-important one, and I cannot begin and end it all at a sitting. I have just thrown out an inkling of a scheme which I hope to see taken up by-and-by in influential quarters, and I will come back to it again at a more convenient opportunity."

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MR. SIMS, in proposing his panacea for defective house sanitation, does not seem to be aware that similar proposals have been ventilated for many years past by sanitarians, and that more than one bill has been drafted for Parliamentary discussion on the lines he suggests. He will forgive me for saying that his present remarks, when presented to us to-day, are as much of a novelty as if he had informed us that Queen Anne was dead, or that the Dutch had taken Holland. We possess besides a whole range of sanitary machinery in the shape of health officers and sanitary inspectors, but that this machinery often requires "oiling" is an undeniable fact. One good Mr. Sims' remarks may effect—namely, that their perusal by his large circle of readers may aid the cause of healthy living which sanitarians have so much at heart. If I might convey a modest suggestion to my friend, I would advise him to read HEALTH regularly, and thereby gain a knowledge of what is being done in the way of bringing the great truths of sanitary science before the people. I can assure him that he will not find the facts of hygiene either dull or horrifying, and we of the

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sanitary army will be only too pleased to secure his co-operation in the work of saving the people who perish, as things are, from sheer lack of knowledge.

✿ ✿ ✿

DR. JEROME TUTHILL says that a novel accident, resulting from a habit of very common prevalence among nervous people, was brought to his notice recently. A young lady presented herself complaining of a constant irritation in her throat. Two weeks previously she had been taken with a severe "sore throat," which was treated by a neighbouring physician. Under his care, the inflammation quickly subsided, but there still remained a sensation of irritation. Examination revealed a small fleshy-looking object, about the size of a kernel of wheat, adherent to the tissues behind the left tonsil, by one end. The other parts of the throat were natural.

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THE little mass could not be detached by a cotton-covered probe; but by the use of forceps it was easily removed, and on examination proved to be a piece of finger-nail, which had become covered by a cheesy deposit. A broken piece of the nail was also removed from under the mucous membrane at the same spot by a sharp-pointed probe. The patient then confessed to the habit of biting her finger-nails, and, moreover, could remember that a day or two previous to the onset of her throat-trouble, a piece of nail which she had bitten off had become lost in her mouth, but after it had caused a fit of coughing she had forgotten about it until reminded by the discovery.

✿ ✿ ✿

DR. F. A. CASTLE, of New York, thus describes, in a letter to the New York *Medical Journal*, a simple, and, as he claims, efficient filter:—"For a long time I have used in my butler's pantry a simple contrivance for filtering water used on the table, which has been so serviceable, and at the same time so inexpensive, that I venture to recommend it. I took an ordinary glass pharmaceutical strainer, and packed the outlet with absorbent cotton so tightly that the water could only flow in drops. By means of a piece of copper wire for a bale, it was suspended from a hook on the lower side of one of the pantry shelves, over the shelf of the sink. As often as necessary, water is poured into the percolator, and the water-pitcher is placed under the outlet. Whenever the cotton shows much discolouration—a thing which is easily observed, owing to the percolator being of glass—the maid replaces it with fresh absorbent cotton. It is in all respects the most practical and cheapest filter I know of, and has no machinery to get out of order, no patent right to carry, and the advantage over most filters that the filtering medium is always under observation, so that there is little risk of contamination of the water by accumulations of filth." Cotton wool is certainly known to act admirably as a mechanical screen for arresting germs.

✿ ✿ ✿

IT is certainly a difficult task now-a-days to invent a new mode of advertising, but Mr. Mellin (of "Mellin's Food" fame) would appear to have hit upon a novel and interesting fashion of calling attention to the merits of his most excellent non-farinaceous food. He has produced a pretty little silver brooch, representing a bird feeding her nestlings. This little work of art Mr. Mellin declares he is prepared to send, free, on application, to all applicants who may address him at Marlboro' Works, Peckham, London, S.E. It is not usual to find manufacturing enterprise equal to the distribution of silver brooches, and Mr. Mellin's idea is worth recording, if only as an illustration of spirited commercial enterprise.

Original Essays

"Life is not to live, but to be well."—*Martial.*

THE WHITECHAPEL MURDERS—OLD AND NEW.

BY DR. ANDREW WILSON.

WHILE it certainly does not, as a rule, fall within the province of HEALTH to discuss matters relating to crime, there are yet certain phases of criminal affairs which may be said to come within the cognizance of the sanitarian, physiologist, and physician.

For instance, in connection with the brutal and apparently inexplicable murders recently committed in the East of London, certain theories have been ventilated which deserve to be noted by the press, lay and scientific, at large. The idea that the murders in question have been committed by a maniac, urged on to commit such horrible crimes by a homicidal lust for blood, has gained credence in many quarters. This idea, on the other hand, has been controverted by at least one medical journal. In my opinion, there is, first of all, nothing unlikely in this theory. Insane persons are capable, if the spirit moves them, of any brutality. The insane man may become a fiend in human form, may outrage every law of human nature, and may perpetrate on himself or others, crimes of the grossest form. He is an irresponsible agent, and is, *de facto*, a lower animal, without possessing the animal's milder instincts in any degree at all.

In the second place, one may ask if it is an absolutely necessary postulate of things to assume that the various murders have been committed by one and the same hand? There is such a thing known as "imitation" in crime as in other details of life; and in the population of a great city like London, there must of necessity be many a criminal mind only too ready and willing to seek the notoriety gained by a predecessor in the shady walk of life.

The medical evidence given at the inquest on the last victim bore out that the manner in which the woman's body was mutilated gave evidence of some acquaintance with anatomy. Upon this declaration a writer in a London evening paper had the effrontery to suggest that the murders may have been the work of some physiologist who desired to gain possession of human organs for purposes of science! Such an outrageous proposition, it is to be presumed, only requires to be mentioned to be reprobated as itself the product of a diseased mind. Anatomists do not require to kill subjects to obtain human organs for investigation, and it is not possible to name any "vivisection" experiment in the same breath with such a brutal and unmeaning crime.

We sometimes glean wisdom regarding the present from the records of the past, and by kind permission of Messrs. Chatto & Windus I have been permitted to quote the account given of old Whitechapel murders by Mr. Walter Thornbury, in his work entitled "Old Stories Retold."* In this book the accounts of many almost-forgotten crimes are fully given, and the volume is, therefore, historically both interesting and valuable.

The story I propose to quote is one of which the daily newspapers have of late been making much in relation to the Whitechapel murders. There is, indeed, a certain marked similarity between the old crime and the new;

* "Old Stories Retold." By Walter Thornbury. (The Mayfair Library.) Price 2s. 6d. Chatto & Windus, 214, Piccadilly, London, W.

and De Quincey has given us a wonderfully accurate and psychological account of the tragedy, which Mr. Thornbury has, in turn, so carefully detailed.

The date of the murders in question was 1811, and the scene Ratcliff Highway. Let us allow Mr. Thornbury to tell the story in his own words. Within a few minutes of midnight, on Saturday, December 7, 1811, Mr. Marr, a young, newly-married man, keeping a small lace and hosier's shop at No. 29, Ratcliff Highway, sent out his servant-girl to pay a baker's bill and to get some oysters for supper. Mrs. Marr was at the time in the kitchen, rocking her baby in its cradle. The apprentice, a young, ruddy, Devonshire lad named Goven, aged fourteen, was either busy in the shop or at work downstairs. The girl was alarmed as she left the house on that peculiarly gloomy December night by seeing a man in a long, dark coat standing in the lamplight on the opposite side of the street, as if watching her master's house. The watchman, a friend of Marr's, had also previously noticed this mysterious man continually peeping into the window of Marr's shop, and, thinking the act suspicious, had gone in and told the proprietor.

A few minutes after Mary the servant left, as the watchman was returning on his ordinary half-hourly beat, Marr called to him to help him put up the shutters, and the watchman then told Marr that the man who had been skulking about had got scared, and had not been in the street since. In the meantime, the girl, looking in vain for an oyster-shop still open, had wandered from street to street and lost her way. It was nearly half an hour before she got home: when she arrived there, to her surprise she found no lights visible, and heard no sound within the house. She rang, then gently knocked, but there was no reply. She rang again, after a pause, more violently. Presently (but we take this fact, with some slight doubt, from Mr. De Quincey's wonderful narrative of the tragedy) she heard a noise on the stairs, and then footsteps coming down the narrow passage that led to the street door. Next, she heard some one breathing hard at the keyhole. With a sudden impulse of almost maniacal despair, she tore at the bell and hammered at the knocker: partly, perhaps, unconscious of what she did, partly to rouse the neighbourhood and paralyse the murderer, feeling now certain that a murder had been committed.

Mr. Parker, a pawnbroker next door, throwing up his bedroom window, the servant told him that she felt sure her master and mistress had been murdered, and that the murderer was even then in the house. Mr. Parker half dressed himself, and, armed with a kitchen poker, vaulted over the low brick wall of his back yard, and entered Mr. Marr's premises. A light was still glimmering through the half-opened back door, by which the murderer must have just escaped. The shop was floating with blood. Marr lay dead behind the counter, near the window, his skull shattered by blows of a mallet, and his throat cut. The bodies of Mrs. Marr and the apprentice, also killed in the same way, were lying in the centre of the shop floor. The wife had apparently been murdered as she came upstairs, alarmed by the scuffle; the apprentice boy after some resistance, for the whole counter, and even the ceiling, was sprinkled with his blood. Some one in the crowd suggested a search for the child. It was found in the kitchen, crushed and with its throat cut, the cradle beaten to pieces, and the bed-clothes piled over it. At this horrible aggravation of a hideous series of crimes, the mob gave a scream of rage and horror. The servant girl became speechless and delirious, and was carried away by the neighbours.

The murderer must have worked with terrible swiftness and sagacity. The watchman remembered that, a little after twelve, finding some of Marr's shutters not quite secure, he called to him, and some one answered, "We know it." That must have been the murderer. Not more than two guineas had been stolen from the house. An iron-headed mallet, such as ships' carpenters use, and with the initials J. P. on the handle, was left behind by the murderer. It was quite clear that the wretch must have stolen in the moment the shutters were up, and while the door was closing. He had glided in, first stealthily locking the door, and then asked to look at some unbleached cotton stockings. As Marr had turned to take these from a pigeon-hole behind the counter, the first blow must have been struck, for the stockings were found clenched in poor Marr's hands. The murder of the child seemed alone to prove that revenge had been the motive.

Next week many persons were arrested about Shadwell on suspicion of the murders, but they were all exonerated and discharged. A sailor, half crazed with drink, accused himself of the murders; but his insanity was soon discovered.

On the Sunday week the Marrs were buried; thirty thousand labouring and seafaring people watching the funeral with faces of "horror and grief." All London was stricken with fear; firearms and thousand of rattles were purchased. There was a horrible alarm that the unknown monster, having failed to secure plunder the first time, would attempt further crimes; the bravest man now dreaded the approach of night.

That dread was too well founded. On Thursday, the 19th of the same month—only twelve nights after the Marr murder, and near the same place—another butchery took place. It occurred at the King's Arms public-house, at the corner of New Gravel Lane—a small street running at right angles to Ratcliff Highway. Mr. Williamson, a man of seventy, and his wife, kept the house; the other inmates were a middle-aged Irishwoman who cleaned the pots and waited in the tap-room, a little granddaughter about fourteen years old, and a young journeyman, aged about twenty-six, a lodger. Mr. Williamson was a respectable man, always in the habit of turning out his guests at eleven o'clock, and finally shutting up at twelve, when the last neighbour had sent for his ale.

Nothing particular happened in the house while it was open that night, except that some timid persons noticed a pale, red-haired man, with ferocious eyes, who kept in dark corners, went in and out several times, and was met wandering in the passages, much to the landlord's annoyance.

When the guests had left, and the lodger had gone to bed on the second floor (the child being asleep on the first), Mr. Williamson was drawing beer on the ground floor. Mrs. Williamson was moving to and fro between the back kitchen and the parlour. The servant was cleaning the parlour grate and placing wood for the morning.

The lodger, nervous in bed, and only able to doze, woke at half-past eleven, thinking of Mr. Williamson's wealth, the murder of the Marrs, and his landlord's carelessness about leaving his door open so late in a dangerous and ruffianly neighbourhood. Suddenly he heard the street door below slammed and locked with tremendous violence. He leapt out of bed, and lowering his head over the balustrade, heard the servant scream from the back parlour, "Lord Jesus Christ, we shall all be murdered!" He felt at once it was the murderer of

the Marrs. Half crazed with terror, and unconscious of what he did, Turner crept down stairs and looked through the glass window of the tap-room (Mr. De Quincey says through the door that was ajar). He could not see the murderer at first, but heard him behind the door, rapidly trying the lock of a cupboard or escritoire. Presently there appeared a tall, well-made man, dressed in a rough drab bear-skin coat, who knelt over the body of the landlady and rifled her pockets. He pulled out various bunches of keys, one of which fell with a clash on the floor. The listening man noticed that the murderer's shoes creaked as he walked, and that his coat was lined with the finest silk.

With the keys now stolen, the murderer retired again to the middle section of the parlour. Even in his fear Turner felt that there was now a moment or two left for escape. The sighs of the dying women, the clash of the keys, and the jingling of the money, would prevent his footsteps on the creaky stairs from being heard. Softly, and with his bare feet, he ran upstairs to escape by the roof, but in his terror he could not find the trap-door. He then ran to his room, forced the bed to the door as gently as he could, and tied the sheets together to drop from the window, which was twenty-two feet to the ground. This rope he fastened to an iron spike he luckily found in the tester of the bed. In a few minutes he had let himself down, and was caught by a watchman who was passing at the time. His first thought had been to save the child, but he was afraid she might cry if he awoke her suddenly, and then both the child and he would have been murdered. Almost speechless, all Turner could do, on reaching the ground, was to point to the door of Williamson's house, and stammer, "Marr's murderer is there."

It was not twelve o'clock yet, and several persons soon assembled: two of the most resolute men, named Ludgate and Hawse, arming themselves with iron crows, broke open the door. They found the bodies of Mrs. Williamson, and the servant Bridget Harrington, with their throats cut, near the fireplace in the parlour. In the cellar they discovered the body of the landlord, which had been thrown downstairs. He had defended himself with an iron bar wrenched from the cellar window; his hands were cut and hacked, his leg was broken, and his throat was cut. The little grandchild was discovered tranquilly asleep. A rush was then made behind, where a noise was heard of somebody forcing windows; and as the door was forced, a man leaped out, crashing down the glass and window-frame. There was behind the house a large piece of waste ground with a clay embankment, belonging to the London Dock Company, and across this the man escaped through the rising mist.

The agitation of the neighbourhood at the news was an irresistible frenzy. People leaped down from windows; every house poured forth its inmates. Sick men rose from their beds. One man, who died, indeed, the next week, snatched up a sword and went into the street. The one desire was to tear and hew the wolfish demon to pieces in the very shambles where he had been found. The drums of the volunteers beat to arms; the fire-bells rang. Every cart and carriage was stopped, every boat on the river, every house in the neighbourhood was searched, but in vain. Rewards of fifteen hundred pounds were at once offered by government and the parish of St. George.

The very next day an Irish sailor, named John Williams, *alias* Murphy, was apprehended at the Pear Tree public-house, kept by Mrs. Vermillot, where he lodged. About half-past one on the night of the first murder, he had come up into the loft, where there were five or six beds, two Scotchmen and several Germans. The watchman was crying the half hour at the time. The Germans were sitting up in bed with a lighted candle reading; but they put it out because Williams said, roughly, "For God's sake put out that light, or something will happen!" In the morning a fellow-lodger, named Harris, told him of the murder before he got up. He replied surlily, "I know it." Since then he had been restless at nights, and had been heard to say in his sleep, "Five shillings in my pockets?—my pockets are full of silver." Alarmed, at the Marrs, the murderer had taken nothing there, although there was a sum of one hundred and fifty-two pounds in the house, besides several guineas in Marr's pocket.

The mallet left, with another maul and an iron ripping chisel, at Marr's, was identified as belonging to Peterson, a Norwegian ship carpenter, who had left it in a tool-chest in Mrs. Vermillot's garret at the Pear Tree, from which it was now missing. Mrs. Vermillot's children remembered the mallet from having often played with it. The prisoner's washerwoman also proved that a shirt which he had recently worn came to her bloody and torn, and he had told her he had had a fight. It was proved that he knew Marr and Williamson, and several publicans certified that they had resolved to refuse him their houses because he was always meddling with their tills. It was also proved that he had recently cut off his whiskers, and that muddy stockings he had worn had been found hidden behind a chest.

This was on the Friday; on the Saturday he was committed for trial. On his way to prison, but for a powerful escort, he would have been torn in pieces by a fierce mob. At five o'clock he was left in his cell at Coldbath Fields, and his candle removed. In the morning he was found dead, hanging by his braces to an iron bar.

A few weeks later the guilt of this horrible wretch was finally and completely proved. In a closet at the Pear Tree public-house some men, searching behind a heap of dirty clothes, found plugged into a mouse-hole a large ivory-handled French clasp-knife, the handle and blade both smeared with blood. Williams had been seen using the knife about three weeks before the Williamsons' murder. They also found a blue jacket of Williams's, the outside pocket of which was stiff with coagulated blood, as if the murderer had thrust the money into this pocket with his hand still wet.

Speaking of the motives which incited Williams to the commission of such horrible crimes, Mr. Thornbury reminds us that Mr. De Quincey hints that Marr and Williams had sailed to Calcutta in the same Indiaman, and that on their return they had both courted the young woman whom Marr afterwards married. The second murder may have been the result of a wish for money with which to find means for escape: a thirst for money and an unquenchable lust for blood are apparent in both. This good, at least, arose from the horrible tragedies: they showed to the excited and terrified city the utter incompetence of the old watchmen, and prepared men's minds for the necessity of a larger, younger, and more disciplined body of police.

Our author adds that, from the first, judgment was close upon the murderer. He was known to be acquainted with the Marr and Williamson families; he had been observed hanging about tills, and suspiciously haunting taprooms and public-house passages; he was seen washing suspiciously dirty stockings and trousers, which he

then concealed; he cut off his whiskers for no apparent reason; besides other clues of evidence already mentioned. To crown all, Williams was so notoriously an infamous man, for all his oily and snaky duplicity, that the captain of his vessel, the *Roxburgh Castle*, had always predicted that whenever he went on shore he would mount the gibbet.

History thus repeats itself in the matter of crimes as of other details of life. The foregoing account proves to us that, unhappily, the present murders are not the first brutalities which, committed in a regular series, have convulsed the greatest city of the world to its very core. The chief point in the recent murders, which most strikes the scientist as of interest, is the absence of any apparent motive for the crime. When the history of the murders of 1888 comes to be fully detailed—as it is to be hoped that history will speedily be forthcoming—the medical jurist will review the crimes in the light of his science, and will draw from his study lessons which may perchance throw a new light on the oldest problem the world knows—that of the complex nature of human motives, acts, and deeds.

BIRTHS AND DEATHS.—In London for the week ending Saturday, September 15th, 2,488 births and 1,331 deaths were registered. Allowing for increase of population, the births were 217 and the deaths 77 below the average numbers in the corresponding weeks of the last ten years. The annual death-rate per thousand from all causes, which had been 17·5, 16·4, and 16·0 in the three preceding weeks, rose again last week to 16·2. During the eleven weeks ending on Saturday last the death-rate averaged 16·2 per 1,000, and 3·8 below the mean rate in the corresponding periods of the ten years 1878-87. The deaths registered last week in twenty-eight great towns of England and Wales corresponded to an annual rate of 17·7 per 1,000 of their aggregate population.

A LITTLE JOKE.—According to a local paper, a Bridgeport man has invented a neat thing in the way of a steam-heater to carry about on the person. It is called "the portable body steam-heater." The apparatus is a small affair, consisting of a copper boiler, under which is a diminutive lamp, all encased in a nickel box, and balanced something like a compass in a ship's binnacle; so that, no matter what position the outside box is in, the boiler and lamp will always remain in the required vertical position. The entire apparatus is so small that it can be carried in the pocket. "After the lamp is lighted, the water in the boiler is heated and circulated through rubber tubes, which run down the legs, around the ankles, up around the back, and back to the boiler. The circulation of the water keeps the body warm on the coldest day. A safety valve and escape for a higher pressure of steam than the affair is allowed to carry flows off at the back of the wearer's neck. Elaborate heaters are being constructed for ladies' wear. They can be worn inside the bustle and entirely obscured. Before going out of the house, the lady's maid can light the lamp, which, by the way, is gauged to run six, eight, or ten hours." It certainly would add to the novel sights of New York to have a half-dozen girls marching up the avenue on a winter Sunday afternoon blowing off steam at the napes of their necks, like so many perambulating peanut-roasters; but think of what would happen in case of a boiler-explosion!!! We don't believe these new heaters will take.

Personal Health

"Be timely wise;
With health all taste of pleasure flies."—*Gay.*

THE INCREASE OF THE ALCOHOL HABIT.

BY DR. E. C. SPITZKA.

(Concluded.)

IT would be, however, an error to assume that the alcohol habit is itself propagated by direct and exclusively hereditary influences. With the exception of that impulsive form of insanity known as dipsomania* (erroneously confounded with inebriety), which is as apt to occur in the descendants of those who owe their nervous taint to other causes than alcohol, no cases of essential transmission of the alcohol habit are recorded. If such transmission really occurred, it would be reasonable to expect it to extend to the variety of liquor indulged in. The following are the facts which have led theorists to assume a transmission of the alcohol habit. The child of the drunkard is more apt than the child of sober parents to be weak-minded and prone to bad influences. He sees his parent drink, lives in the neighbourhood of the same rum-shop, is compelled to purchase drink for his father when indolent or paralyzed by previous excesses, and eventually, misled by curiosity or by comrades, takes the first forbidden sip. In this way the vice is transmitted, not as a tangible bodily condition, but as a result of bad example and vicious association. It is also to be borne in mind that, contrary to what the laity suppose, a tolerance of alcoholic beverages is not transmitted by the immoderate drinker. His descendants do not bear excesses as well as the descendants of temperate parents, for he has mortgaged the resisting power of his offspring. That inebriety when once established, whether in the original drunkard or in his descendants, tyrannizes the individual till he sinks its resistless victim, is significantly manifest in the records of the New York County Workhouse. Of 1,000 persons committed to that institution on the charge of being habitual drunkards, 936 had previously been thus committed from one to twenty-eight times. Even among the wealthier classes, as shown by the statistics of inebriate asylums and homes, at least two-thirds relapse after their alleged recovery.

This liability to relapse is the great difficulty encountered by those who attempt the reform and cure of the inebriate. It must be confessed that there is but one radical remedy, and that is the compulsory enforcement of total abstinence. The question arises, whether sober and industrious citizens, who are the overwhelming majority of the population, should be curtailed in anything that they regard as an enjoyment or a relaxation, because a minority, composed of weaker brethren, cannot be redeemed from a bad habit save at the expense of those who are neither directly nor indirectly responsible for their excesses. The further question would arise whether much good would be gained by curing the inebriate of one habit,

* To avoid misunderstanding it is well to remember that inebriety and dipsomania are only accidentally related. The inebriate is the chronic drunkard of every-day observation. His vice is a mixture of indulgence and habit, and eventually he exhibits the disease signs collectively named "chronic alcoholism." The dipsomaniac has periodical outbreaks of an impulsive craving, which in the absence of liquor would be gratified by any other narcotic, or in the absence of narcotics would explode in some violent manifestation. If alcohol were banished from the face of the globe, inebriety were impossible, but there would still be dipsomaniacs.

and allowing him to contract another. It is charged that in prohibition States, like Maine, the use of opium and its various preparations shows a progressive increase. The writer knows a number of patients who plunged into excesses in tobacco or narcotic drugs after being checked in alcoholic indulgence, thus developing conditions fully as serious as those produced by alcohol, if more insidious and less explosive in their violence. The inebriate is a bruised reed, and will yield to other temptations when the channels leading to a resumption of his original vice are blocked up. The writer believes that no one who has familiarized himself with the medical as well as the social aspect of the question will seek a remedy in sudden revolutionary methods. The procedure of those who would, at one blow, destroy all breweries, distilleries, and vineyards reminds him of the quack who attempts the cure of the morphine *habitué* by the sudden withdrawal of the drug. This violent procedure sometimes succeeds, but always at the price of indescribable and needless suffering. What is true of such a case individually considered would be true of the whole community if the use of alcohol and stimulants were to be suddenly suppressed.

The remedy, so far as it lies in the hands of Government, should operate more gradually and reasonably. Analytical chemists and experimental physiologists have demonstrated that the worst effects of alcoholic indulgence are attributable to spirituous liquors adulterated with cheaper but more damaging alcohols, some of which have been shown by exact experiment to be eight times as poisonous to the system as the alcohols resulting from natural fermentation. It has also been shown that alcoholic diseases have largely increased since what the French term "vinage"* has been resorted to in the preparation of wines. Inasmuch as it is the liquors thus prepared that constitute the bulk of what the inebriate drinks, it would seem that two things were clearly pointed out to the social reformer. First, to urge Government to supervise the manufacture of all alcoholic beverages, and to punish relentlessly those who resort to adulterations of an injurious character. Secondly, to favour the use of the products of natural fermentation as against the products of distillation. It is certain that for one inebriate who has become such through the use of beer, ale, or porter, there are three who have become so through the use of wine, and five hundred who owe their disease to brandy, rum, whiskey, and gin. Indeed, it is an exception to find any person committed to the workhouse for habitual drunkenness who is not an indulger in one of the four last-named articles.

I cannot recall a single case of alcoholic insanity due to the abuse of malt liquor alone, and very few which were due to wine as compared with those attributable to spirituous liquors. It is true that the phenomena of chronic alcoholism are in their severity proportionate to the amount of alcohol ingested, irrespective of the degree of dilution; but the danger of spirituous liquors lies in the fact that the smaller bulk of each drink invites frequent repetitions, and that its convenience of stowage enables it to act in greater toxic quantities and in briefer time than either vinous or malt liquors. There can be no question that the greater mass of alcoholic crime, pauperism, insanity, and inheritable degeneracy would be done away with if, by high taxation, rigid Governmental supervision of distilleries, discriminating licences operating so as to discourage the sale of spirituous liquors, the public were weaned and diverted from their use to the more harmless indulgence in wines and beers. It is true that even if mankind abandoned the former, and indulged only in the latter, all the evils of the alcohol habit would not be eradicated. But its ravages would involve a very small percentage of the population; they would not be as rapid, and rarely, if ever, as severe as at present.

The contrast so happily sketched by Hogarth in his cartoons, "Beer Street" and "Gin Lane," is as true to-day as it was in his time, and he anticipated with his crayon, by more than a century, the conclusions of a committee of a society devoted to medical jurisprudence in New York City, in whose deliberations I was privileged to take part. That body essentially confirmed the propositions of the International Congress on Inebriety held in Paris in 1878; propositions which are becoming more and more definitely established in the discussion now being held before the French Academy, and whose adoption is imperative and urgent. With the present rate of increase of inebriety and resulting alcoholic insanity and degeneracy, the races which are the bearers of modern civilization will largely owe their degradation and extinction to it, and its inseparable concomitants.—*Forum.*

* The addition of alcohols, often of the cheaper and more dangerous kinds, to wines deficient in natural alcohol.

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MRS. SLIMDIET (boarding-house keeper).—My gracious! Bridget, the paper says lots of nervous systems is bein' wrecked by strong coffee. Bridget—Yes, mum; but ——. I don't want anyone's blood on my head. Chuck another gallon o' water into that pot.

THE GOOD SAMARITAN'S SURGERY.—The necessity for a revised version of the New Testament is very apparent in the authorized translation of St. Luke's Gospel, x. 34, where the evangelist, himself a medical man and particularly careful (see Mr. Hobart's treatise on the subject) in his use of medical terms, describes the Good Samaritan's treatment of the traveller who had been wounded by thieves on the highway. According to St. Luke, the Samaritan came up to the man, bound fast his wounds, and poured on the bandage (that is, immediately over the seat of injury) the oil and wine which in combination were the recognized application for such lesions at that time, and for centuries later, in the East. The authorized version is either unintelligible or it reflects on the good man's surgery. It makes him first bind up the wound, and then pour in the oil and wine; or it makes him pour in the oil and wine concurrently with his adjusting the bandage. The former rendering is unmeaning; the latter would make the practice more than questionable. The pouring oil and wine into an unclosed wound was certainly what the evangelist would not have approved or the Samaritan practised. The truth is, the authorized translators have not accurately rendered the Greek. St. Luke's expression, ἐπιχέων, does not mean pouring in, but pouring on. The Vulgate version, "infundens oleum et vinum," appears to have misled them, as well as Beza, who, in his excellent Latin translation, preserves "infundens." The proper Latin equivalent for ἐπιχέων should have been "superfundens," or, better, "superinfundens." And then the translation would have run intelligibly and *secundum artem*, thus: "and bound up his wounds, pouring on oil and wine." The passage is well handled in Canon Humphry's admirable Companion to the Revised Version (Cassell & Co.). About a hundred and fifty years after our Lord's time Galen prescribed for a wound on the head a remedy similar to that of the Good Samaritan: "Having taken some quite fresh olive leaves and pounded them in a mortar, you add *quantum sufficit* of oil and black—*i.e.*, full-bodied—wine, and knead the whole into a paste, which you may apply to the seat of injury." The bandage saturated with the oil and wine was the Good Samaritan's equivalent for the Galenical epithem.—*Lancet.*

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THE PEPTONIZED MILK CURE.

THE value of fresh milk in the treatment of disease is not equalled by any other nutrient fluid. Milk contains all the principles necessary to sustain life—albumens, carbohydrates, and fat, or, in plain English, casein, milk-sugar, and cream. While it does not "constitute a perfect and sufficient food for adults under normal circumstances," in case of disease it is often absolutely indispensable. It is often the sole food relied on in acute illness, and many chronic cases of a most obstinate and intractable nature yield completely to the curative effects of milk. Perhaps it is not saying too much to assert that the therapeutic advantages to be derived from its administration in chronic disease are too lightly regarded except by a few.

Karell says: The methodical use of the milk cure gives results such as can be obtained in no other way. It may be employed with more or less favourable results in dropsy of all kinds, obstinate dyspepsias, severe disturbance of the nervous system of hysterical or hypochondriacal origin; also in neuralgias, when these stand in some relation to abdominal disorders, and in hyperœmia of the liver, but especially in anomalies of the general nutrition. Even in organic heart disease, in advanced liver affections, and in the later stages of Bright's disease, a certain improvement—that is to say, a lessening of the dropsy—is in some cases effected for a long time. He promises most favourable results, when the disorder is chiefly one of the digestive organs (Von Ziemssen's Therapeutics).

Milk, the natural secretion of the mammary gland, may be called a vital fluid. It is the only food adapted by nature to the requirements of infant life; everything else is unnatural to the young infant. It cannot be made by any building-up process, and has no artificial equivalent. Its composition is complex and inimitable.

What can be more absurd than the claim that any manufactured food approximates to this wonderful composite nature of milk? An examination of the various infant and invalid foods in the market reveals that they are made of cane-sugar, glucose, starch, gum-arabic, &c., none of which is found in mothers' milk, and of various vegetable and animal albumens, about as much allied to the albuminous constituents of milk as man is allied to his remotest reputed progenitors. Many manufactured foods contain milk, and no more reprehensible custom abounds than that of spoiling milk by canning it for use in the sick room. Consider the physiological character of milk—how this fluid by nature performs its functions under fixed provisions of time, form, and material integrity, and then reflect on the processes to which manufacturers subject it. Its symmetry of composition is destroyed; it is boiled, evaporated, put in pickle in cane sugar, and supplied to the public as an equivalent of mother's milk.

Notwithstanding all that can be said of the great usefulness of mother's milk, certain insurmountable obstacles have seemed to present themselves which confined its application to comparatively narrow limits. If cow's milk were given a few times, and did not seem to agree with the patient, this was attributed to idiosyncrasy, and the milk abandoned. Thus, while unnumbered cases of "gastric disorders, diarrhœa, dropsy following malaria, and that from kidney disease and nerve disease," &c., have been cured, they are insignificant in number compared with the myriads of cases of children starved on most unnatural, starchy, meat, or other prepared, canned, or bottled foods. They are trivial compared with the many stomach derangements, aggravating or symptomatic, of serious diseases. They hardly count when compared with what might have been accomplished had the cow's milk been made more assimilable. Peptonization was not yet known.

A practical means of so modifying cow's milk that it would be uniformly retained and relished may be looked upon as one of the greatest advances in dietetics. The difficulties are now overcome, and the therapeutic application of milk extended throughout the domain of medicine. With a Zymine Peptonizing Powder, partially predigested milk can be prepared by anyone, all that is necessary being to add a powder to each pint of milk.

HEALTHY MARRIAGE.

THE day when true sanitary marriage will become the rule is a long way off. The need must be made more plainly evident. In this country we are developing, from the amalgamation of many strains, a race wholly new to the world. Our immigrants, as they intermarry with those who have preceded them, produce descendants of a quicker and more aggressive mental type than their own, and it is noted by Darwin that the bodies and limbs of these descendants are very noticeably longer than those of their ancestors.

When we shall have learned, and learned to apply, the laws of proper selection in marriage, our race ought to be second to none in health and physical development; and that means, also, intellectual advancement. A wide step toward the needed reform has been taken by us as a people, for far more than ever before are we interested in physical culture, upon which health so clearly depends. There is a promise that it will yet have the high place in the curriculum of education which it deserves.

Our schools now, on account of the absence of a proper system of *physical* culture, are constantly sending out into the world young men and young women who, by reason of their infirmities, never ought to marry. And, again, our ill-ventilated counting-rooms and factories are generating an army the offspring of which must present every phase of bodily imperfection. The remedy for this is physical culture, and the sooner it is recognized by all, and particularly by our educators, the better. Social reformers and philanthropists have here a wide field for cultivation. Let them impress upon our growing youth the importance of healthy bodies, harmoniously developed by proper exercise.

Young women, perhaps even more than young men, need encouragement to strive to secure bodily perfection by proper exercise. They must realize that mere beauty of face, while it attracts and possibly excites the admiration of some, does not alone constitute true beauty, which can only be founded on perfect health.

Another thing which young ladies must remember: No matter how richly nature has endowed them with outward charms, they can retain them only so long as they enjoy good health. They may also be assured that beauty founded on perfect health continues even to old age. No one desires to see Spartanism revived in these times, but we may learn valuable lessons from it. The Spartans worshipped the beautiful and useful, and they took means to secure them. Bodily perfection was

attained by enforced, well-appointed exercise. There were but few sickly men and women among them. None sickly were allowed to marry, and all in health were compelled to do so; if they refused they were punished. Bachelors, after a certain age, were shut out of the society of women, and once a year were shamed in public. Neither boys nor girls were allowed to marry before maturity was reached. This Spartan system of marriage, purely for the welfare of the State, continued for 500 years, and during that time there were produced a succession of the strongest and bravest men and the most healthy and beautiful women that the world has ever known.

There is a remarkable and self-imposed family law which popularly prevails, we are told, throughout Brazil in relation to matrimony. It is recognized among all the higher classes. The man who is about to marry is required to furnish a certificate from one or more physicians that he is free from diseases of a certain character, and that he is free also from all signs of any of the diseases which are liable to be transmitted to his offspring. Not only that, but the physicians consulted must testify that, so far as they can learn, there exists no reason to believe that the union will be other than in accord with the laws of sanitation.

Such a practice might offend the "weaker brethren and sisters," of whom so many examples are everywhere found; but when we compare what is—in the way of diseased and deformed children produced as the fruits of unhealthy marriage—with what might be—in the shape of healthy and beautiful lives—we can hardly object to the idea above noted, of exercising care in respect of a lifelong union fraught with the greatest responsibilities which men and women can undertake.

PICKLED BUGS FOR COLDS.—A California Chinaman has found a use for the bugs and beetles which are attracted and killed by the electric lights. He gathers them and pickles them in brandy. "Heap good for cold," he says.

MILK IN POWDER.

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WOMEN AND DOMESTIC SANITATION.

THAT the majority of modern dwelling houses, even those of the better class (and some would say especially of the better class), are not properly constructed with reference to the laws of health is a fact that is generally admitted. It is also generally assumed that this is due to ignorance or carelessness on the part of the architect or builder, and no doubt in many cases this is true to a considerable extent.

There are, however, other reasons for this state of affairs which are worthy of remembrance, and some of these have been indicated in a lecture on "Sanitary Science in the Home," by Mrs. R. H. Richards, who is one of the instructors in the Massachusetts Institute of Technology in Boston, and is well qualified to point them out. She says: "I know no man will dare say it in so many words, and therefore it is the more incumbent upon me to do so. I am sure if the much-abused architects and builders were to speak their minds they would say that it was the women who hindered them from carrying out the plans which they know to be best. How can a builder survive the scorn which greets him when he proposes to leave all the drain-pipes exposed? How can he put hoods over the gas-burners when the artistic sense of the woman who is to occupy the room is offended? How can he convince the women of the family that they should wear thicker clothing in the house in the winter, and not expect to have a whole house made so comfortable that they can wear thin slippers and silk dresses in weather approaching that of the Arctic regions? Does it avail for him to argue with them? Must he not cater to their tastes? And, as they are the ones who live nine-tenths of the time in the house, the man of the family lets them have their own way."

There is truth in this presentation by Mrs. Richards, and it is also true that if the architect in general practice insists upon proper arrangement for ventilation and house drainage, he will drive away a certain class of customers, though we believe that in the long run he will gain more than he will lose. People are beginning to understand that if they wish to enjoy the conveniences and pleasures of city life—to have a bath-room next door to the bedroom, to dine in a large company, to visit the theatre, and to do all this without incurring the risks and discomforts of foul air—they must pay for it, pay for it not only in money, but by giving up certain ideas of adornment. As fast as a real demand arises for healthy houses, and well-ventilated churches and theatres, they will be supplied. The ignorance which stands in the way at present is more in the people who use houses than in those who plan and build them.

Nevertheless, we cannot put the whole blame on the women, and especially an architect cannot make use of this plea in extenuation of defects in his plans, unless he can show that he did point out the right way of securing proper ventilation and drainage, and that his suggestions were rejected. Meantime, Mrs. Richards' suggestion that chemistry and physics should be taught in girl's schools, with reference to their practical applications in daily home life, is an excellent one, and is already being followed in a few of the schools of the best class. The difficulty is to find competent teachers, but these also will come with the demand for them.

These wise words from Mrs. Richards readily recall the good work done by another Massachusetts woman, Mrs. H. M. Plunkett, to whose exertions the establishment of the first board of health in that State is largely due, and who has thus been indirectly though not less

greatly helpful to those other States who have followed the example of Massachusetts in this respect.

Mrs. Plunkett's little book on household sanitation, entitled: "Women, Plumbers, and Doctors," will be excellent reading for those ladies who may wish to profit by the warning we have quoted from Mrs. Richards.

It is a noteworthy circumstance that two women, acting entirely independent of each other, have been among the first to show a due appreciation of the important influence exerted by their sex in matters so closely concerning the healthfulness of our homes, and not content with merely calling attention to the fact, they have made earnest effort to have that influence exerted in the right direction.

The inference is by no means strained that in domestic sanitary engineering a new and wide field of usefulness and profit may yet be opened to women.—*Sanitary Engineer.*

Varieties of Coca Leaves.—The two chief varieties of coca, the Bolivian and the Peruvian, are often so different, that recently some South American writers have not hesitated to describe the Bolivian coca as *Erythroxylon Bolivianum*, that is, in other words, an attempt to make out that it is a distinct species. This, however, is not the case, and all botanists will agree that the plants in question, if properly designated, may at most be termed *E. coca* var. *Bolivianum*. The two varieties above referred to are distinguished by the leaves and by the fruit. The latter is largest in the Bolivian, whilst the leaves are largest in the Peruvian variety. It appears that the Bolivian kind of leaf is much esteemed by the natives of Peru, who prefer it to their own product, and pay dearer for it.

Malvina Cream.—This is a preparation made by Prof. I. Hubert, Toledo, Ohio, and is "warranted to remove freckles, beautify the complexion, and preserve the smoothness of the skin." *New Idea* has examined it and reports that it is put up in a white glass ointment-jar, containing 386 grains. It is a white, pleasant-looking, and pleasant-smelling ointment. The following formula will make a preparation closely resembling it:—Saxoline (or white vaseline), two hundred and sixty-five grains; white wax, fifty grains; spermaceti, thirty grains; bismuth oxychloride, forty grains; mercuric chloride, half a grain; spirit of rose (four drachms of oil to one pint), twenty minims; oil of bitter almonds, one-tenth of a minim. Warm the saxoline, white wax, and spermaceti together until melted. While cooling, incorporate the bismuth oxychloride and the mercuric chloride, the last previously dissolved in a little alcohol, and when nearly cold stir in the perfumes. A lotion is used along with the cream. It is a milky-white fluid, consisting of milk of almonds (two drachms of almonds to the pint of rose water), each pint containing two grains of mercuric chloride and three drachms of zinc oxide.

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Public Health

"Health is the first Wealth."—*Emerson.*

SOME RISKS OF ATTENTION TO HEALTH AND SANITATION.

By Norman Kerr, M.D., F.L.S.

There is no rose without a thorn. The pursuit of pleasure is frequently accompanied by pain. Knowledge is often acquired at the cost of life itself. Science has her victims, and one of our most valuable industries (our collieries) annually numbers most saddening fatalities. Disease and death are the appanage of humanity.

We cannot, therefore, expect that the attainment of personal and public health will be without risk. Nor is it. As typhoid may lurk in the natural beverage of the teetotaler, and scarlet fever in the common draught of healthful infancy, so may blood poisoning dog the steps of the devotee of Hygeia, at whose shrine it is the fashion for votaries to worship.

The only risk in attention to personal health, to which I shall allude, is the risk involved in the attention itself. Time and again I have seen patients who killed themselves prematurely by the concentration of all their faculties in the absorbing study of how to regulate their life on scientific principles. What to eat, how seldom, how little—what to drink, how often, how much—whether to sleep on their back, or their right side, or their left side, with their feet to the north or the south, or the east or the west? How many yards to walk at a time (miles would be too risky)? Whether they should not have, say, veal broth instead of chicken broth, as the former is declared to be more quickly digested than the latter by their tables of digestion (which tables have probably been issued by a vegetarian society, which ought to have no personal knowledge of the preparation of slaughtered animals).

Such are but the types of the thousand and one questions with which the slaves of the Goddess of Health persecute themselves, their families, and their physicians. As I recall to mind the endless interrogatories of a score of such health-worshippers, never happy unless they were miserable, never enjoying a meal unless they thought they did so at the peril of their life, I often marvel how, in addition to having worried themselves (and sometimes their husbands or wives) into an untimely grave, they did not succeed in driving me to—drink.

Infinitely better for such if, like Macbeth with physic, they had thrown care "to the dogs," given up all concern for their vitals or their victuals, been utterly regardless of health and hygiene. Better too for their much-tried offspring, whose digestion had been by turns tortured and coddled, if these had been brought up unconscious of science, turned out on the Highland hills, fed on oatmeal porridge, or peasebrose, or, in fact, anything that "came along." Of course, the fittest only would have survived, but the survivors would have been more numerous, and a trifle happier, than they have been.

In a word, if food is to nourish and not to destroy, it must be prepared with "brain sauce." Theories and tables, dietaries and chemical analyses, valuable as they are, must not be implicitly obeyed, but utilized and applied with that most essential but not too fashionable possession—common sense.

One man's meat is another's poison. What fattens Brown may kill Jones. Mutton is authoritatively pronounced to be much more digestible than beef, yet a man

or a woman who thrives on the roast beef of Old England may be precipitated into a convulsion at every mouthful of a mutton chop. The idiosyncrasies of the human constitution are what "no fellow can understand." For example, the favourite crustacean which with its life exchanges the colour of the deep blue sea for a fiery hue, while it rejoices the heart of Smith, invariably hurries Mrs. Robinson into an attack of pyrexia as acute as the "lobster fever" which is so apt to seize the belles of a garrison town.

Turn we now to efforts at sanitation; what risks can there be in attempting to keep one's house and belongings in as healthful a condition as possible? I shall point out but one or two such risks.

A whole family in the country—father, mother, and four children—suffered for over six weeks from a variety of symptoms specially implicating the skin in the nasal region, with sickness and a general feeling of *malaise*, indicative of blood poisoning. None of the domestics had suffered. A careful inquiry excluded everything in the house and in the food supply except the water drunk at meals. The water in the well whence the supply was drawn was analysed and found excellent. It remained to inspect the filter, which was discovered to have been the *fons et origo mali*. The truth turned out to be that the head of the family, afraid to drink water direct from the well, had ordered all the water brought to table to be filtered. This had been done, but the filter had never been cleaned. MORAL:—If you drink filtered water, attend to the filter yourself, and regularly clean it out at least once a week.

Another case was slightly different. It was in London. The water supply was intermittent. The family were away on a summer holiday for three months. A caretaker and her husband were in charge of the house, with instructions to see that everything was kept in good going order. They drank only a little water, and used very little for every purpose. They remained in excellent health. The family returned, and within sixty hours were all prostrate with diarrhœa, sickness, and allied symptoms. Inquiry showed that the cistern had never been cleaned during those three summer months, and that it had been literally stagnant, so little of the contents having been drawn off.

In these two instances, types of a considerable variety in my professional experience, virtue was not its own reward. Had there been no attempt at health, there would have been better health. In the country case, the only persons injured were those who adopted any precautions against presumed water impurities, the precautions themselves being the origin of the ill-health. In the city case, if the family had shut up their house, they would have treated it as in an insanitary condition, and seen to the cleansing and purification of the disused cistern before, or immediately after, their return.

I cannot dwell on the many other risks in the race for sanitary perfection. More than once I have seen life lost in the effort at its prolongation. An intellectual and cultured gentleman was possessed with a perfect craze for ventilation. Owing to the numerous contrivances every room in his house was the battle-ground of contending aërial currents. Nothing could convince him that the first necessity of life was not a strong draught. There was not a corner in his residence where one could enjoy a calm siesta. "Breezes and plenty of them," was his *sine quâ non* of health and comfort. That house was a mine of wealth to his physician till death secured for the impatient patient that quiet which he denied himself in life. On the tombstone of more than one such hapless mortal might with truth be inscribed: "Died from over draughts on the banks of air."

Again, sanitary appliances and excellent drainage may be designed, but inferior or fraudulent workmanship may convert them into death-traps. You may have the very best pipe drains, but unless you are vigilant the under surface of the joints may be left unstopped, sewage poison leaking into and poisoning the dwelling. On every consideration there ought to be registration of plumbers. Or, trusting in the installation, however long ago, you may go on from year to year relying on your time-honoured provision; like a lamented and distinguished friend of my own who, when dying from enteric fever, said the mischief could not have lain in the cesspool, for that had been so constructed that it could be left alone without being cleaned for thirty years. Here, again, an attempt at sanitation was the cause of death.

Were we intelligent and perfect, precautions would be reliable, but as not over many of us are intelligent (Carlyle said we were mostly fools in these islands), and none of us is perfect, it is incumbent on us, "when we ask for Glenfield starch, to see that we get it." The twofold lesson which I wish to inculcate is: not to worry ourselves and others into an asylum, a cemetery, or a crematorium by constant fear as to the possible consequence of everything we eat, drink, or do; but to apply hygienic and dietetic scientific teaching with an average amount of common sense. Not to "go it blind" on Sanitary Science, not to aim higher than we can hit, not to rely further than we can trust, but to see that when we adopt sanitary precautions we either attend to them ourselves, or secure their efficient execution, lest in our endeavours at good health we lose it, lest in our struggle for life we succumb to a premature death.

SANITATION IN INDIA.

MR. B. F. BONHAM, United States Consul-General at Calcutta, has sent to the State Department an abstract of a lecture by Mr. Justice Cunningham, at the Parkes Museum, on "Sanitation in India," from which the following interesting extracts are made:—

"The views of the sanitary parties in India might be summarized in the following proportions: That the mortality of the population is vastly in excess of that of civilized countries, and in particular cannot be calculated at less than 10 to 15 per thousand in excess of the English rates, an excess making, at least, 2,500,000 of deaths and 50,000,000 cases of severe diseases; that this excess, or a large portion of it, is preventible by practical means fairly within human competence; that the existing administrative machinery is powerless to make any impression on this excessive mortality, but that its tendency is rather to intensify it; that there are reforms which materially affect it, which might be adopted without grievance to the people or detriment to the Government finances; and that it is the duty of the Government to adopt such reforms.

"As to the excessive mortality, the lecturer pointed out that wherever registration approached completeness there were high ratios of 30 per thousand and more, the central provinces ratio being 34 and the north-western provinces 32; that many large areas with a population of a million and upwards showed ratios of 40 and 50 per thousand, and many towns and municipalities showed ratios of 40, 60, 70, 80, and even higher. Such ratios showed that the laws of health were being contravened on an enormous scale. A curious instance of the extreme

prevalence of disease was shown in Calcutta, where, out of a population of 445,000 persons, no less than 325,000 were treated annually in public medical institutions. Coming next to preventability, experience proved that, wherever effective sanitation was carried out, the ratios of Indian mortality sank at once to that of England.

"The great mass of Indian mortality was occasioned by epidemic diseases, which are preventible or mitigable, and in England have either disappeared or sunk to insignificant proportions. The Army Sanitary Commission gave what they call a 'deplorable record' of 38,000,000 victims within a single decade to such diseases. Coming to particular instances, the extraordinary reduction in the mortality of the European army from 69 per thousand to 12 or 14, and the invaliding ratio from 43 to 23, the cholera mortality from 9·24 to 1·17, showed what sanitation could do in the case of men newly exposed to a tropical climate. The reduction of the mortality in gaols was equally remarkable: it is now about one-third of the former rate. In Madras the extraordinarily low ratio of 17·80 per thousand has been attained. The high ratio of over 100 per thousand in some Bengal gaols pointed to active insanitary conditions of soil, structure, or mismanagement.

"Another striking instance is that afforded by those parts of Calcutta which have been properly sanitated, and which would compare favourably with the best parts of London for healthiness; while the insanitary wards of the city are scourged with epidemics—are the perennial home of cholera—and the suburbs of Calcutta have long been a scandal, not only to the Bengal Government, but to English civilization."

PROPOSED SEWERAGE SCHEME FOR MANCHESTER.—An official inquiry was lately opened at Manchester by Mr. S. J. Smith, C.E., on behalf of the Board of Trade, as to an application by the City Council for sanction to borrow £450,000, for the purposes of sewerage and sewage disposal, and £40,000 for the purchase of land to be utilized as a place of deposit for the refuse. The scheme, which is on a very extended scale, has been in course of preparation for four or five years, and is, with some modifications, similar to that in operation in Leeds.

SALICYLATED EGGS.—M. A. Lambert, the pharmacist-in-chief of the Bron insane asylum, near Lyons, is of opinion that, notwithstanding all orders and decrees, the use of salicylic acid as a food preservative is as prevalent as ever. Lately he discovered the poison in eggs, the last diet article, perhaps, where it could have been suspected. Dealers in salicylic acid, it seems, claim that their product is as efficient as lime for preserving eggs, and yet imparts no unpleasant flavour, while at the same time the acid does not penetrate through the shell, but simply acts as an antiseptic on the egg surroundings. Whatever may be the truth of some of the assertions, certain it is that salicylic acid does penetrate through the shell, and soon permeates both the white and the yolk. To detect the adulterant in the white, the albumen is to be beaten with a little water, and on the liquor being acidulated and shaken with ether salicylic acid may be easily identified by the usual tests. The same process answers for the yolk, but it must be first coagulated by heat to avoid the formation of an oily emulsion difficult to manage.

DISEASES OF THE NOSE, with Chapters on Ozœna, Impure Breath, Polypus, and Malformation of the Nose, and Analysis of Cases treated by a new method. By LITTON FORBES, M.D., Senior Surgeon to the Eye and Ear Hospital, 67, Wells-street, London, W.—HENRY RENSHAW, 356, Strand, W. Price 13d. —[ADVT.]

Healthy Houses

"A happy home must be a healthy home."—*Anon.*

DWELLINGS AND HEALTH.

IN the course of a recent Cantor lecture before the Society of Arts, Prof. G. Aitchison, A.R.A., said:

This age is a peculiarly health-seeking one, and it does not seek health, as the Greeks did, by early rising, temperance, open-air exercise, and training; but it asks how health can be preserved and promoted by the removal of external sources of disease, so that it may have freedom to infringe with comparative impunity nature's laws. If the legislature sets the example of turning night into day, by sitting up nearly all night and beginning work at noon, those that are in its service must do the same, and the families of its members are almost compelled to do likewise. Members, too, as a rule, suffer from want of sleep. We have only to look at their cadaverous faces, their worn and exhausted air at the end of a session, to see how injurious this is to health. We must expect, too, that all the less exalted members of society who have a chance will do the same, but by doing so they lose a great deal of daylight and the stimulation of the sun and daylight air, for night air is said to contain more carbonic acid gas; and, besides, if nature intended us to sleep at night, it is hardly likely we can contravene the law and be equally well and strong.

External poisons are the most important things to protect ourselves from, especially when we have enfeebled our bodies, and these are mostly conveyed to us by mephitic vapours, and what the doctors call septic dust; we want our houses and other buildings so constructed that they can be freed outside from their palls of dust and soot by means of a fire-engine or a sponge, and inside by the broom, the dusters, and the flannels of the housemaid.

Foul and poisonous air has scarcely any connection with decoration, but with one or two exceptions is in relation with pure science and its applications. The exceptions are when some of the materials used for decoration have a pernicious chemical action on the air, or when parts of their substance readily come off, and poison us when breathed, or when in contact with our skin. The former is said to be the case when preparations of arsenic and some other dyes and pigments are used, and are not varnished.

The dust that is not septic (disease-producing) consists of minute particles of raw or cooked earth, stone, and metal, and the ill-effect it may produce can only be from irritation of the mucous surfaces, by clogging fine vessels, or by getting into parts where it is not wanted; particles of some metals, if numerous enough, may poison us, as fire guilders are poisoned by mercurial fumes.

The septic dust consists of particles of vegetable or animal fibre, sometimes laden with the germs of disease, the pollen of flowers—by some of which hay fever is said to be produced—the minute seeds of plants, including fungi, the eggs of microscopic creatures, and microscopic creatures themselves.

If we think for a moment that dough, after a short exposure, rises, and that fermentable liquids ferment, we must acknowledge the almost universal prevalence of germs in the air—for I believe both fermentations are owing to plant growth, not to speak of exposed distilled

water being shortly full of microscopic animals and vegetables.

There is still another source of poisoning, *i.e.*, by human and animal exhalations, including our own; these are said to be absorbed by certain substances in an odd way; dry wood, vegetable fibre, and silk are said to mainly absorb the foul-smelling exhalations, while wool, hair, and feathers mainly absorb the perfumed ones.

Anything that forms a dust-trap is, so far as possible, to be avoided, particularly when these traps can only be partially emptied at long intervals, for every breath of air dislodges some of the lighter particles. The absorbents of the foul-smelling exhalations have also the property of imparting them to the damp air by which we are poisoned or re-poisoned. Consequently, we want to avoid as much as possible all woven and felted stuffs in our houses, and have wall and paper protected by varnish.

Bear with me if I diverge a moment from philanthropic motives. At present, mankind seems oblivious of the fact that they must breathe pure air to be well. For their supply of air they mostly trust to imperfection of workmanship, the porousness of materials, and to the smoky or soot-polluted air that comes down the chimney, and to the same exit for the foul air—although it is mostly below their mouths when they stand upright. To anyone who is aware of this necessity for pure air the sight of a room with no appliance for the entrance of fresh air, or the exit of foul, causes a shudder for the loss of present comfort and the future gain of a headache, particularly when there is a party and the weather is cold. From 40 to 200 people are commonly massed in a room for hours that has not pure air enough for two people, and that usually has lights enough in it to alone make it unfit for respiration. Yet you may take my word for it as an architect that not one man in a hundred will hear of ventilation. He usually says, when pressed: "I want no ventilating conundrums; if the rooms are too close I will open the door, and if that is not enough I will open the window."

NEW HOSPITAL IN DOUGLAS.—Recently the Lieutenant-Governor of the Isle of Man formally opened a new hospital, erected by Mr. H. B. Noble, an inhabitant of Douglas, on a site given by Mr. Noble's late wife. It will replace the old inconvenient and unsuitable hospital in the lower part of the town.

CREAM AS A DIET FOR CONSUMPTIVES.—Mr. Tuer of the "Leadenhall Press," writes on the use of cream with hot milk for the weakly. Though not a medical authority, his experience will be worth attention. The value of cream as a nourishing and sustaining food is well understood, but it is a food apt to disagree. If mixed with milk before boiling, cream becomes partly coagulated, and therefore difficult of digestion. Some months ago, observes Mr. Tuer, I tried the effect of good, thick, sweet cream stirred into very hot milk, that is, immediately after boiling. The mixture remained, as I had hoped, perfectly limpid, and without tendency to coagulate. Grateful to the palate, and easily assimilated, I find from daily experience that a full mid-day meal of this food (at all times for the weakly) infinitely superior to cod-liver oil, consisting of a quarter of a pint of cream, a pint or a pint and a half of milk, and a due proportion of bread, may be taken even by a dyspeptic like myself, without fear of after discomfort.

Jottings from the Journals

"Th' ingredients of health and long life are
Great temperance, open air,
Easy labour, little care."—*Sir Philip Sydney.*

The Physical Dangers of Civilization.—The character of civilization is quite as plainly indicated in the common every-day perils which people run as by its laws, its social institutions, or other indices. In the neolithic age, such as our copper-coloured predecessors on this continent enjoyed, the careless wayfarer stood in imminent danger of being tomahawked and scalped. In the days of chivalry, when the Christian graces and the sense of personal honour, with all its noble attendant virtues, had begun to dominate men, the hand had not yet ceased to find its most important function in taking care of the head. Midst the splendours of the Italian Renaissance the individual paid the price of prominence in continual risk of the bravo's dagger or the cup of poisoned wine. So one may go on to specialize the current dangers threatening men in different epochs. The dangers which lie in daily ambush for us to-day are so notably different from those of the earlier periods of civilization that they invite comment. We have become the victims of our own conveniences. This is peculiarly the age of machinery and science applied as art, and we have to pay the penalty in physical risks to life formerly non-existent. We have ceased to stand in much peril of lawless violence, except when we travel by coach or rail in Texas or Arizona. Our dangers are railway and steamer accidents, the crush of vehicles in crowded streets, the grip of swiftly running machinery on the careless workman, the dangling electric wire, the treacherous bobtail car, and the like. "The hand of little employment hath the daintier sense," remarked the cynical Hamlet of the gravedigger, tossing up skulls with many a quip. The citizen's callous indifference in rushing through a mass of crowded vehicles is well contrasted with the timidity of the rustic, who hesitates long before so perilling his life. Use blunts the edge of perception, and it is only some unusually startling accident that gives us pause. If one could measurably apply the calculus of chances to the risks he undergoes in an active day in the streets of New York he would probably be amazed at the result. Even in this day of still-hunting for news and hunger for a paragraph, not all the accidents are reported. Manufacturers whose operatives are snatched up by a belt, or railway companies whose brakemen slip off the top of a freight car, do their best to suppress such matters. The law of compensation requires us to pay the price for the increased luxuries and facilities offered by the age of science. The problem of social economy is to lower the price to its minimum, as in the case of active commodities. Public attention has been slowly awakened to this question. There is much more disposition than ever before to hold railways responsible in case of accidents to passengers, if official carelessness or neglect can be shown. Boiler inspections are strictly enforced with more and more rigour. The companies, who have harnessed the electrical demon to some man, are held as trustees of very dangerous, if of very useful powers. Municipal legislation in large cities has been stirred up to exact a close responsibility in such matters. The lively and public spirited Mayor of New York has taken the earliest opportunity to attack the bob-tail car nuisance. A hundred examples could be cited to illustrate the growing tendency. But, after all, the difficulty is not so much in the lack of law to provide for cases of criminal neglect in the administration of the

organized conveniences, which science has given us, as in good-natured indifference to its enforcement. A little spurt of indignation is followed by quick forgetfulness, till the occurrence of the next tragedy. This is all owing to the lazy, *laissez-faire*, happy-go-lucky disposition of the great American public. It is not disposed to be vigilant in prevention, and to insist on its rights in season and out of season. Our English cousins are far more prompt and severe in their assertion of that sense of individual importance which crystallizes into public spirit. Our own evolution is in the right direction, but we must grow not a little yet before we succeed in properly abating the perils and nuisances now characteristics of great cities.—G. T. FERRIS, *in the "North American Review."*

Sanitary Appliances, Etc.

DIGESTIVE TEA.

FROM "The Universal Digestive Tea Company," of 64, Corporation-street, Manchester, we have received samples of their tea, for which is claimed the desirable properties of a neutralized tannin, an agreeable aroma, and an absence of bitterness. After a careful examination of this tea, we are able to say that the claims of this article are in every way genuine. We have tested this tea in respect of its tannin, and have found that even after prolonged infusion, it does not develop the bitter taste of other teas; while, when used naturally and in the ordinary way, it possesses an agreeable flavour and pleasant taste. For those with whom ordinary teas disagree, this Digestive Tea may be safely recommended; and the statement that its use obviates dyspepsia and acidity would appear to be fully borne out, not only from our own experience, but from that of others, who have reported their opinions to us. This "Digestive Tea" appears to be a product, in fact, in which the injurious oils and tannin are present in a minimum degree, or are altogether neutralized. Tea-drinkers will appreciate the article as a veritable boon, and no higher praise can be bestowed upon any similar article.

SAFE HOUSE DRAINAGE.

IT is prescribed in the Model Bye-Laws of the Local Government Board that the waste pipe from every bath, sink, or lavatory, also the overflow pipe from any cistern, and from every safe under any bath or water closet, shall be taken through an external wall, and discharged in the open, over a *channel leading to a trapped gully grating at least eighteen inches distant.* The object of the foregoing arrangement is to secure the necessary break in the continuity of air in the waste pipe and drain; as gullies, even above the water trap in them, tend to become foul—for which reason the waste pipe should not deliver directly over or into them, but the outlet should be at a certain distance at one side of or opposite the gully.

In order to facilitate the carrying out of this arrangement, Mr. Hugh S. Cregeen, Surveyor of the Bromley Local Board, Kent, has recently introduced a Combination Gully Trap and Channel in Stoneware. At present channels are constructed of brickwork, concrete, or worked stone; whereas the Combination Gully Trap and Channel in Stoneware is at once simple, cleanly, and easily fixed. The circular form of gully admits of the channel being fixed either at right angles to or parallel with the wall of the house. Messrs. James Stiff & Sons, of Lambeth, manufacture the Combination Gully Trap and Channel, of which useful appliance we give an illustration.

COMMENCEMENT OF A NEW VOLUME ON FRIDAY, OCTOBER 6th.

IMPORTANT ANNOUNCEMENT.

BONUSES TO SUBSCRIBERS TO "HEALTH."

HEALTH, as our readers are aware, may be obtained of all Booksellers and Newsagents, and at the Railway Bookstalls, on the day of publication. It may also be ordered from the PUBLISHER, 2, Paternoster-square, London, E.C., who will send the journal, post free, for a year, on receipt of postal orders for 10s. 10d.

As many of our readers who live in remote districts prefer to obtain HEALTH from the Publisher direct, and as we are desirous of increasing the already large number of subscribers who give us a yearly order for the journal, we offer the following FREE GIFTS and BONUSES to all who subscribe to HEALTH for one year or longer:—

(1.) To each Subscriber who remits 10s. 10d. to the Publisher, entitling him (or her) to receive one copy of HEALTH, post free, for one year, we shall present a copy of Dr. Andrew Wilson's work, entitled "A Manual of Health Science" (Longmans & Co.), value 2s. 6d.

(2.) To each subscriber who remits 21s. 8d., entitling him or her to receive two copies of HEALTH weekly, post free, for one year (or one copy for two years), we will present Dr. Richardson's "Ministry of Health" (Chatto & Windus), value 6s. The copies of HEALTH so ordered may be posted to separate addresses.

(3.) To each person who subscribes 32s. 6d., for three copies of HEALTH, post free, weekly, for one year, we will present the volume by Dr. Richardson mentioned above, and also the handsome, illustrated book entitled, "Studies in Life and Sense," by Dr. Andrew Wilson (Chatto & Windus), value 6s.—being a free gift of the total value of 12s.

The bonus last mentioned will also be presented to anyone who succeeds in obtaining three yearly subscribers to HEALTH, and who remits to the Publisher the sum of 32s. 6d., together with the names and addresses of the persons to whom the copies are to be posted each week.

As the literary gifts above-mentioned constitute books containing solid and reliable information regarding health and other matters of popular scientific interest, it will be seen that the above scheme, while intended to increase our already large circulation, also offers distinct advantages to new subscribers who guarantee by their subscriptions a year's support to this journal. All communications regarding subscriptions and other purely business details connected with HEALTH should be addressed directly to the PUBLISHER, 2, Paternoster-square, London, E.C., and *not to the Editor.*

A NEW REMEDY FOR DIABETES.—A new drug of apparently great value has recently been introduced into the market. It consists of powdered Jambul seeds—the seeds of a plant *Syzygium Jambolanum* or *Eugenia Jambolana* found in various parts of India, the Mauritius, Ceylon, and the United States of Columbia. It has been tested by the medical faculty of England, Germany, and the United States, and is said to be a promising remedy in all cases of diabetes. The action of the drug is to prevent formation of sugar in the system, and so to stay waste; and cases are on record showing that under its influence the special restrictive diet—so obnoxious to diabetes patients—can be dispensed with.

"ELECTRICITY IS LIFE."
(TRADE MARK.)

PULVERMACHER'S

WORLD-FAMED

GALVANIC BELTS,

FOR the CURE of NERVOUS DISEASES.
HAVE RECEIVED TESTIMONIALS from
THREE PHYSICIANS to
HER MAJESTY the QUEEN,
THE ACADÉMIE DE MÉDECINE of Paris and
FORTY MEMBERS of the
ROYAL COLLEGE of PHYSICIANS of LONDON.

RECENT TESTIMONIALS.

GALVANISM *v.* INDIGESTION and NERVOUS DEBILITY.

Edgbaston, Birmingham, 16th Sept., 1888.

Dear Sir,—It is now about 10 years since I testified to the great efficacy of your appliances, and during the time I have continued to enjoy most excellent health, and am never troubled with indigestion, debility, and kindred ailments. I think it almost impossible for my health to be better.

To brain workers and nervous sufferers your appliances are most valuable, and I cannot too strongly recommend them.—Yours very truly,

J. L. Pulvermacher Esq., 194, Regent-street, W. W. ARTHUR.

GALVANISM *v.* NERVOUS EXHAUSTION.

Kingsworth, near Ashford, Kent, 4th September, 1888.

Dear Sir,—I have been wishing to write to you for some time to thank you for the great benefit my lady friend has derived from your treatment. Everyone notices the change in her, and she can now walk any distance with pleasure, and has life and energy.

We gladly express our joy and gratitude for the great benefit received, and are yours truly, M. HILLS.

Messrs. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM and SLEEPLESSNESS and PAINS in the LEGS.

Caterham, Surrey, August 9, 1888.

Sir,—I have much pleasure in sending you word that your Galvanic Belt has quite removed the severe pains in my legs which I suffered from, and I can now sleep well at night. My bladder is much stronger, and I am better in every way, and I consider your treatment the greatest blessing. I shall recommend your Belts to every one.—Yours faithfully,

J. L. Pulvermacher, Esq., 194, Regent-street, W. JOHN SCANLON.

GALVANISM *v.* RHEUMATISM.

39, Linaker-street, Southport, August 4th, 1888.

Gentlemen,—In May last I purchased a Galvanic Belt from you for Rheumatism, and after wearing it for three days, to my astonishment I could point my foot and walk with it, and now I can walk a couple of miles and can get both my hands over my head.

I am in my seventieth year, and before I used your Belt I had great difficulty in walking across the room, and could only just get my right hand to my mouth to feed myself, but I could not touch my lips with my left hand, and despair seemed to be getting fast hold of me.—Yours gratefully,

D. CORDINGLEY.

Messrs J. L. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* NERVOUS EXHAUSTION.

11, Magdalen-terrace, Ripon, 19th July, 1888.

Dear Sir, I ought to have written to you before to tell you that I am now quite well again, and I have not the least doubt that your Galvanic Belt has done me a wonderful amount of good. I only wore it for two months, when it quite restored me. I recommend your treatment wherever I can.—Yours very truly, J. J. SIMPSON.

J. L. Pulvermacher, Esq., 194, Regent-street, W.

GALVANISM *v.* NERVOUS DEBILITY.

67, Huskisson-street, Liverpool, July 10th, 1888.

Dear Sir,—I have been really impatient to tell you of the good results of your treatment in my case.

An improvement began the day I put the belt on, and with trifling exceptions I have not suffered from that excessive weakness since.

I feel quite enthusiastic about your method, and have strongly recommended it to my friends.—Yours faithfully, A. BROADFOOT.

J. L. Pulvermacher, Esq., 194, Regent-street, W.

GALVANISM *v.* NERVOUS DEPRESSION.

High-street, Borough, S.E., July 4th, 1888.

Gentlemen,—I am pleased to inform you that your Galvanic treatment has greatly benefited me, in giving me renewed energy, and I am now quite free from the nervous depression which I experienced so much before wearing your Belts. My sleep is sound and refreshing, my bowels are regular, my appetite good, and my appearance much improved in every way.—Yours respectfully, E. CAYNE.

Messrs. J. L. Pulvermacher & Co., 194, Regent-street, W.

GALVANISM *v.* NERVOUS EXHAUSTION.

The distressing symptoms of Nervous Exhaustion and Debility are speedily removed by means of PULVERMACHER'S world-famed GALVANIC BELTS, which are so arranged as to convey a powerful electric current direct to the affected parts, gradually stimulating and strengthening all the nerves and muscles, and speedily arresting all symptoms of waste and decay.

ADVICE PERSONALLY or by LETTER, free of charge.

FOR FURTHER TESTIMONIALS, both Medical and Private, see new Pamphlet, "GALVANISM: NATURE'S CHIEF RESTORER OF IMPAIRED VITAL ENERGY," post free on application to

J. L. PULVERMACHER AND CO.,
GALVANIC ESTABLISHMENT,
194, REGENT-STREET, LONDON, W. (nearly opposite Conduit-street).

Our Letter-Box

"Conference [maketh] a ready man."—*Bacon.*

NOTICES TO CORRESPONDENTS.

All Communications for the Editorial Department (including Books for Review, Specimens of Sanitary Appliances, &c.), to be addressed to "THE EDITOR OF HEALTH," 2, PATERNOSTER-SQUARE, LONDON, E.C. *Those intended for the Publishing Office to be sent to* MR. A. P. WATT, THE PUBLISHER, *at the same address.*

RULES FOR CORRESPONDENTS.

OWING to the mass of letters which reaches us each week, we respectfully direct the attention of Correspondents, desiring replies in the LETTER-BOX DEPARTMENT of HEALTH, to the following rules:—

1. All questions are answered free of charge in the columns of HEALTH.
2. All letters must be legibly addressed to "The Editor of HEALTH, 2, Paternoster-square, London, E.C.," *and to no other address.*
3. Questions to which answers are desired by post, are so replied to solely at the Editor's discretion. If no answer is sent by post, the query will be replied to in the "Letter-Box" columns of HEALTH. A stamped addressed envelope must accompany all queries to which a private reply is desired.
4. Addresses of physicians and surgeons will, as heretofore, be forwarded FREE to Correspondents on their enclosing a stamped addressed envelope for reply.
5. Correspondents are requested to write on one side of the paper only, and to make their inquiries as brief as may be consistent with clearness.
6. From the necessity of sending HEALTH to press early in the week, no Correspondent can be replied to in the "Letter-Box" columns in the same week in which the inquiry is received. Replies crushed out of any issue will be found in the succeeding number.
7. No Post Cards must be used in sending queries. Violation of this rule deprives the sender of the privilege of a reply.

QUERIES AND ANSWERS.

REPLIES: GENERAL, SANITARY, AND MEDICAL.

[Readers of HEALTH will kindly note that when back numbers of the journal are desired, the letters containing such requests and stamps for the numbers should be addressed to the PUBLISHER of HEALTH, 2, Paternoster-square, London, E.C., and *not to the Editor.*]

COOPER. — Wear a suspensory bandage regularly, and take plenty of nourishing food. Nothing can be done to alter the condition you name. It is natural to you, but is not in any way a disease, and can have no ill effect upon your health.

NIL DESPERANDUM.—We know nothing of the remedy you mention, but we may add that the names quoted in its testimonials are not those of well-known medical men. Read the pamphlet recommended to "A. Baillie" in the present number, and follow out its directions regarding the use of a tonic.

W. CARSON, 425.—If you had read the pamphlet with any degree of care you would have seen that what you regard as an ailment is not so in any sense. Avoid constipation and fluids late at night, sleep on a hard mattress in a well-ventilated room, and do not sleep on your back. The pamphlet will give you full directions regarding diet for constipation. Avoid alcohol entirely, and take plenty of open-air exercise.

THOMAS RAY.—1. Certainly: by the careful use of the tonics and other means (diet, exercise, &c.), all duly described in the pamphlet you say you have read. 2. The term means simply a general irritability of mind and temper. 3. No limit as to time can be fixed, as one case takes longer than another. A few weeks should make a great difference in any ordinary case.

PATER.—[Please note that your letter was erroneously addressed. HEALTH Office is at 2, Paternoster-square, London, E.C.]. 1. It is said to be effective; we should say a little Condy's Fluid in tepid water is preferable. To be used *after*, not before. It should be efficacious as far as the circumstance you name is concerned. 2. No such draught is ever so used, and no drug should be employed for such a purpose by any one. 3. Yes: "reversion" is quite common among mankind, and the children of a woman by her second marriage often resemble those of her first family. The laws of reversion operate equally in man and in lower animals.

THIGH.—In such a case we regretfully fear we can be of little service to you. The long-standing nature of the disease renders it peculiarly intractable. Our best advice is that you should consult a good surgeon again. Only a personal examination and opinion on your case is worth having.

B. D. E.—For damp hands, try Eau de Cologne, four ounces; tinct. belladonna, half an ounce. The hands to be rubbed several times a day with this. Label, "Poison—for outward use only."

N. FELLOWS.—The matter is one for a legal opinion. Consult a respectable solicitor.

B. C. C.—1. The cerebellum is the "lesser brain," and regulates the harmony (*i.e.*, "co-ordinates"), of the muscular movements. 2. The "cortical" part of anything is the external or outside layer. 3. Named after Malpighi, the discoverer.

ELGIN.—See article on "Glycerine as a Cure for Constipation" in our last number.

NOBILIS.—You smoke too much, and all your symptoms are those of tobacco-excess. The remedy is, therefore, in your own hands.

MERTON.—For blackheads in the skin use Bayley's Soap; press out the filled-up glands, and sponge the parts thereafter with Bayley's Eau de Cologne (17, Cockspur-street, Pall-mall, S.W.).

ALARMIST.—You may test the air of your room as follows:—A wide-mouthed, stoppered bottle of eight ounces capacity is taken, and a tablespoonful of lime-water placed in it. When agitated with the air of a room, the degree of milkiness of the lime-water (caused by the carbonic acid of the air forming chalk by its union with the lime of the water) will show the impurity of the atmosphere.

SEPTIMUS.—Take a vegetable dietary—stewed fruits, apples, or oranges, &c., and whole-meal bread, with Grant's Oat Flour for supper and breakfast; avoid tea and coffee, and on each alternate morning take twenty drops Cascara Cordial or two Cascara Tabloids, and see that you sponge with cold or tepid water each morning.

DOLOR.—Take the following pill:—Extract of Barbadoes aloes, two grains; extract of nux vomica, half a grain; extract of gentian, a grain and a half. Make a pill. One such pill to be taken once a day, half an hour before meals. The druggist should make you half a dozen such pills at a time.

SPUR.—Try Bayley's Tooth Powder (17, Cockspur-street, Pall-mall, London, S.W.) and the mouth-wash made by this firm. Both are reliable preparations.

A. BAILLIE.—Read the pamphlet advertised in our pages, "A Lecture to Young Men" (free by post for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.), and attend to the directions there given regarding your health.

E. BOASE.—You must be properly fitted with spectacles, as a proper fit serves to cure such irregularities. Write to, or call upon, Mr. Browning, 63, Strand, London, W.C., and take his advice regarding the glasses adapted for your cure.

INVALIDUS.—Your cure must consist in a revolution of your food-habits and strict attention to digestive action. Study and follow carefully advice given to "C. Eage" in last week's HEALTH. By attention to the details given, you will remove and cure your ailments.

H. W.—Take the Fer Bravais in fifteen or twenty-drop doses, in water, after your meals, twice daily. Iron, as a rule, acts most beneficially when it is absorbed into the system with the food. Avoid taking the tonic along with tea or coffee.

W. P.—You must persevere with the appliances you name. They are thoroughly genuine, and very effective. You must not expect to receive violent "shocks" from the use of the appliances in question. Their action is of a milder character, but thoroughly curative. Take the advice of the makers, and adopt the full treatment recommended. If we can be of further service, let us know. Read the pamphlet, "A Lecture to Young Men," post free for 1s. 1d., from Mr. Renshaw, 356, Strand, London, W.C.

C. E. G.—The Digestive Tea (noticed in our pages) is an excellent brand, and should be tried by you. Your dyspepsia is largely fostered by your excessive coffee-drinking. Give up coffee, and try the tea above noted.

G. MILLS.—For drunkenness try the following: Half an ounce of ground quassia is to be steeped in an ounce of strong vinegar, adding a pint of water before steeping. A teaspoonful in a little water should be taken every time the liquor thirst is felt. It is said to satisfy the craving, and produces a feeling of stimulation and strength.

PES PLUMBI.—Correct your digestive troubles, first of all by attention to the rules given in advice to "B. Alexander" in HEALTH of last week, and try a hot salt bath night and morning for the affected limb. Hot salt applied dry in a flannel bag has often a good effect in such cases. If this fails, try "massage" of the parts, and have this treatment applied daily. There is probably some local weakness of the muscles or circulation.

CRAIGO.—Let the patient exercise great care in diet, which should, for a time at least, be of very light character. Milk (peptonized with Fairchild's Powders, such as your druggist will procure for you), milk puddings, white boiled fish, and strong soups, made with Brand's Beef Essence and Brand's Bouillon, should be given in place of solid flesh food. Rest after meals is absolutely necessary, while for the relief of the pain, the powders recommended to "Yak" in last week's HEALTH might be tried. If this advice is not satisfactory in respect of curing the symptoms, let us hear. Constipation must, of course, be avoided.

E. BARBER.—Wash the parts and the underclothing, previous to the application of chrysophanic acid, for your skin-affection, with a solution of bicarbonate of sodium or potassium. This will prevent the staining.

TINCTURE.—We do not think the remedy you name will be effectual. *Actæa ramosa* is not an officinal drug, but is used in America, where the plant grows. It is said to increase the action of skin and kidneys, and is used as a general stimulant and tonic. The dose given is from twenty to thirty grains; but you should not use the drug save under medical supervision. We recommend you to use at the times you indicate hot hip-baths, as hot as can be borne, when the pain is severe; while the digestion should be also looked to, and constipation especially avoided. If such simple remedies (together with the giving of twenty drops of Fer Bravais after food, twice daily, in water) do not relieve the case, consult a competent physician. There are many causes of such an ailment, and he will be able to advise you exactly.

C. HATCHWAY.—The plan to which you allude is that of rinsing the mouth every half-hour with a dessertspoonful of a twenty per cent. solution of permanganate of potash, taking care to hold the liquid in the mouth for some minutes. This is said to relieve toothache at once.

GOODWIN SANDS.—Read the pamphlet recommended to "A. Baillie" in the present number of HEALTH, and you will find full information given you therein. There is nothing radically wrong with you, and you only require to follow the directions given regarding diet and cold sponging to get quite well.

T. L.—Yes; many causes may so operate. Among the most frequent causes of the arrest are cold, damp and chills, and sudden mental shock. The cause you name is quite sufficient to produce such an effect. Change of climate often produces irregularities.

W. MASON.—See advice given to "A. Baillie" in the present number. The pamphlet will give you directions and information regarding the regulation of your life; but you are perfectly well, and need fear nothing from any past ailments. Steer clear, however, of quacks.

THE VALUE OF ADVERTISING.

(From the "Kettering Observer.")

SOMETIMES, when we have been dilating upon the value of advertising to tradesmen, we have cited the examples which they have every week before their eyes in the various patent medicines advertised in this journal. We have often said that we know, from unsolicited testimony, that it pays to advertise with us; and we have further said that when a reader buys anything through this medium, we should be pleased if that fact were notified by the vendor. In return, it is equally incumbent upon us, if business is done satisfactorily, to say so.

* * * * * *

One day we met a young man whom we have known for several years, Mr. Herbert Ball, of Albert-street, Kettering, a bricklayer by trade, and he informed us that he had met with an accident, and was on the sick list. A brick, or some heavy substance, had fallen on his right foot, injuring it rather badly. It was at one time feared that lock-jaw would ensue. Happily, it did not; but the shock to the system was so great that it caused extreme nervous debility. We saw Mr. Ball in a reading-room when he could not hold a newspaper for five minutes together, and his whole system appeared to be completely unhinged. He looked like one who was fast becoming a physical wreck. The next time we met with him—about a fortnight afterwards—a great change had been wrought in his health and appearance. "What do you think?" said he. "I had seen and read so much in your paper about Warner's SAFE Cure, that I thought I would try it. So I purchased a bottle and a box of pills, at Mr. Moore's, the chemist, in Gold-street. The first dose took effect, and in three days I was like a new man. I had been under the doctors three weeks, and was not getting any better. My appetite had failed, and I was fast losing flesh; but now it's all right again. As a proof of that, I've just been eating a plateful of pickled onions. I'm all right now. I can eat almost anything. People laughed when I said I'd try the SAFE Cure, but I'm thankful I did try it. If my testimony is worth anything, you can publish it, and at the same time express my gratitude to the discoverers of such wonderful medicine."

That is, as nearly as we can recollect, the pith of the statements made to us by Mr. Ball; and as he is one of our townsmen, we thought we would publish this, because it serves to show—first that advertising pays; second, that patent medicines are of real value in some cases; and, third, that testimonials are not always mere concoctions of untruths, as some persons suppose.

JOHN BARRETT.—Numerous articles on "cycling" from a health point of view can be had from the Publisher of HEALTH. They are contained in back numbers of this journal. The medical man to whom you refer can know nothing of cycling, if he condemns its moderate use. The opinions of an obscure medical man are of no value in face of facts, and of such opinions as those of Dr. B. W. Richardson (published in *Longman's Magazine* and elsewhere) and others—all enthusiastic cyclists. Replying to your enquiries, we say (1) That cycling as ordinarily pursued is very beneficial as a mode of exercise. (2) See past numbers of HEALTH. (3) An ordinary person, engaged in business all day, may safely cycle from ten to fifteen miles after business hours; but the exact distance depends on health, strength, physical condition, &c.

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GRAPHIC. — Wash the parts regularly night and morning with tepid water and Bayley's Spermaceti Soap (17, Cockspur-street, Pall-mall, London, S.W.), and after washing apply a lotion consisting of equal parts of Hazeline and water.

OBESITY (Malvern).—Read the article on "A New Fat Cure" in HEALTH No. 280, and follow out the directions therein given. An article on "Fat Cures" in *Longman's Magazine* may also aid your cure. Briefly, limit your starch and sugar, and take a moderate quantity of fat and nitrogenous foods, and take as little liquid as possible. Fat-cure, however, is a matter for guidance by a competent physician. We cannot say that your present medical adviser seems to indicate the ordinary and recognized modes of cure. Send us stamped addressed envelope, and we will forward you address of a London physician whom you may consult.

RICHARD II.—Your irregularity in the matter of meal-times is probably at the root of all your troubles. See that you correct this point, which is a vital one in so far as your health is concerned; and for the rest, attend to the directions given to "C. Eage" in HEALTH No. 285. Write again, if not cured.

READER OF "HEALTH." — Drink Pitkeathly Water (see advertisement in our pages) regularly night and morning, and you will probably find your symptoms to disappear. Take also fifteen drops Fer Bravais after your meals in water, thrice daily.

W. SPARK.—You should try a milk diet for a time, but you had better suggest this to your doctor. Yours is a case in which it is impossible to help you save after personal examination. If you are not satisfied with your local adviser, why not seek the advice of a consulting physician in Edinburgh or Glasgow? This is the only advice we can give you, in addition to counselling you to take milk diet and very light food.

ADVICE TO PEOPLE ABOUT TO KEEP FOWLS.—Save your money, and buy some of Borwick's Gold Medal Baking Powder.

NELLY RAE.—You must try a change of air and scene, and take plenty of open-air exercise. If you can go to a mild seaside place so much the better. After your meals take fifteen drops Fer Bravais in water, and rest after your meals regularly. Do not take much solid food for a time. Take plenty of new milk, milk puddings, white boiled fish (no tea and coffee), stale bread only, and Scott's Midlothian Oat Flour night and morning. By care in diet and change of air you will recover your tone. If not, write again, and give full particulars of your case.

V. X. R.—Your letter interests us. In reply, we might point out to you that such a long-standing habit is, of course, difficult of eradication, but that to a man of your good sense this result should be perfectly attainable. We would recommend neither of the plans you suggest. Look to your health first of all, and take plenty of out-door exercise, to the extent of tiring yourself out daily. Particularly avoid constipation (see advice given to "C. Eage" in last week's HEALTH), always a fertile cause of irritation; eschew late suppers and fluids late at night also. Let your diet be plain and wholesome, and try a cold sponge bath each morning. Remember that, apart from the moral and mental phases of your case, all physical (and medical) aid is hopeless. The cure really lies with yourself; therefore, brace up your moral tone, and determine. As Georges Ohnet holds, all things are possible to him who says, "I will." If we can help you further, let us know. Bromide of potash in a thirty-grain dose may be taken if a sedative and depressant is needed.

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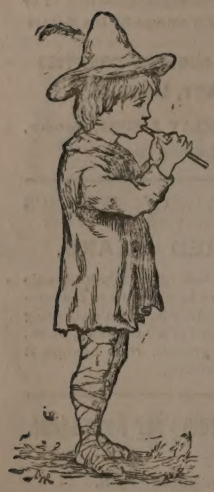

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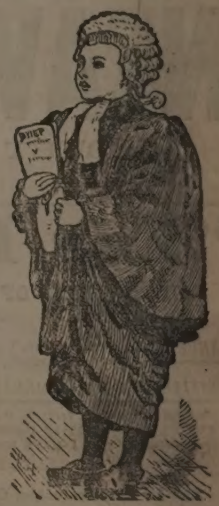

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